AMENDMENTS TO THE SPECIFICATION

Please replace the present title with the following amended title:

OPTOELECTRONIC DUST COLLECTING MACHINE FOR KILLING BACTERIA AND VIRUSES

Please insert prior to original paragraph no. 1 on page 1 beginning at line 1 the following new paragraphs:

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to dust collecting machine and more particularly to an optoelectronic dust collecting machine for killing bacteria and viruses.

2. Description of Related Art

Dust collecting machines have a problem in that they do not eliminate bacteria and viruses.

Please replace the paragraph no. 2 on page 1 beginning at line 3 with the following amended paragraph:

SUMMARY OF THE INVENTION

This invention relates to an innovative, advanced and environment favorable handheld optoelectronic dust collecting machine for killing bacteria and viruses. This handheld optoelectronic dust collecting machine for killing bacteria and viruses can use extreme ultraviolet rays to eliminate viruses and bacteria on a floor and in a carpet, furniture and automobile compartment and to draw sundries such as garbage into the garbage box of the dust collecting machine, in which a separate extreme ultraviolet ray transmitting tube is provided for eliminating viruses and bacteria of garbage and sundries in the garbage box for a certain ~~long~~ time so as to avoid breeding of new viruses and bacteria.

Please cancel paragraph 1 on page 2 as follows::

~~Optoelectronic Dust Collecting Machine for Killing Bacteria and Viruses~~

Please replace paragraph 3 on page 2 with the following amended paragraph:

The innovative invention involves an optoelectronic dust collecting machine for killing bacteria, viruses. This machine firstly uses a movable cleaning head of a ~~built in~~ an extreme ultraviolet ray transmitting tube built in the movable cleaning head to clean the floor or carpet, while eliminating bacteria, viruses on floor, outside and inside carpet with extreme ultraviolet rays emitted from the extreme ultraviolet ray transmitting tube. Meanwhile, the dirty such as garbage ~~ad~~and sundries, drawn into this dust collecting machine will be kept in the inner chamber at the front of the optoelectronic dust collecting machine. The inner chamber is provided with an another separate extreme ultraviolet ray transmitting tube for radiating extreme ultraviolet rays to eliminate viruses and bacteria existing in the dirty in the inner chamber so as to avoid breeding of new bacteria, viruses.

Please replace the paragraph bridging pages 2 and 3 with the following amended paragraph:

The ~~main fittings of the~~ optoelectronic dust collecting machine for killing bacteria and viruses of this innovative invention include ~~an~~ a plurality of extreme ultraviolet ray transmitting tubes, a draft fan, an electric motor and a filter screen. When the garbage on the floor, or outside and inside the carpet is drawn into the optoelectronic dust collecting machine by the movable cleaning head of the dust collecting machine, the extreme ultraviolet ray transmitting tube of the movable cleaning head radiates extreme ultraviolet rays so as to eliminate bacteria, viruses on the floor, or outside and inside the carpet. Meanwhile, the drawn dirty garbage ~~dirty~~ will be kept in the inner chamber of the garbage box at the front of the dust collecting machine by being

obstructed by the filter screen. ~~A separate~~At least one extreme ultraviolet ray tube is provided in the inner chamber of this garbage box that can eliminate possible new bacteria, viruses, etc. breeding in the dirty garbage ~~dirty~~. The draft fan is driven by the electric motor to produce strong suction air flow so as to draw in the dirty garbage ~~dirty~~ along with the air through the air inlet of the movable cleaning head. The air is drawn in the dust collecting machine via the filter screen through the movable cleaning head and the inner chamber of the garbage box and then exhausted outside from exhaust outlets on both sides of the dust collecting machine. In other words, when the air flows through the movable cleaning head and the inner chamber of the garbage box, the bacteria, viruses in the air are eliminated by the extreme ultraviolet rays. Therefore, the clean and fresh air is exhausted from the exhaust outlet so that the quality of environmental air indoor can be improved.

Please replace the first full paragraph on page 3 with the following amended paragraph:

BRIEF DESCRIPTION OF THE DRAWINGS

This dust collecting machine is shaped of streamlined structure, and other characteristics of this innovative invention are illustrated in details in the following description:

Please replace the first full paragraph on page 4 with the following amended paragraph:

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS OF THE INVENTION

The optoelectronic dust collecting machine for killing bacteria, viruses has a streamlined-shape machine body (1); an air inlet (2) is provided at the front of this machine body (1); a draft

fan (3) is mounted onto the inner surface of the air inlet (2) and connected with a electric motor (4) that is mounted at the fixed place in the machine body (1). Two function switching push buttons (5) are provided at an upper portion in the front of the machine body (1); ~~an~~ exhaust outlets (6) are arranged on the front and the back surfaces of the machine body (1); an external power supply socket (7) and a charge indicator lamp (8) are provided on the front surface of the machine body (1). A chargeable (i.e., re-chargeable) battery (9) and a AC municipal power line (16) are arranged in the chamber at the rear of the machine body (1); ~~a slingshot~~an extendable handle (10) and a locking fastener (11) are provided on the trailing end of the machine body (1), where a long pipe (12) is also provided so that one end of the handle (13) can easily slide in and be locked by the locking fastener (11). There is a metal tube (14) at the front end of this handle (13), and a ~~hand~~ handle made of plastic cement is arranged at the trailing end of the metal tube (14). Two I-shape ~~horses~~ sitting pads (15) are mounted at the bottom of the machine body (1), which are mainly used for the user for convenient connection to the external power line (16) during charging.

Please replace the second full paragraph on page 4 with the following amended paragraph:

There are several long-hole locations on the fixing rack (18) of the switching push buttons, which are used for fixing the function switching buttons (15) and the snap fastener (19) that is used for fastening the garbage box body (20) for the purpose of flexible connection of the garbage box body (20) with the machine body (1). A circuit board (21) and a circuit element (22) are provided at the bottom of the ~~said~~ function switching push buttons (5) and a cover (24) is connected on the push handle (23) at the upper end of the function switching push buttons (5).

An ~~hand handle~~ opening (48) is arranged at the upper end of the machine body (1) for the user's convenient lifting and carrying.

Please replace the third full paragraph on page 4 with the following amended paragraph:

There are two metal contacting parts (25) on the front end of the machine body (1), which are mainly used for connecting a power supply for the extreme ultraviolet ray transmitting tube (32) in the garbage box body (20).

Please replace the paragraph bridging pages 4 and 5 with the following amended paragraph:

A filter screen (26) and a filter screen rack (27) are provided in the garbage box body (20); a quadrate air inlet (28) is provided at the front end of the garbage box body (20) and a movable door (29) is provided at one end of the quadrate air inlet (28). Round contacting sockets (30) made of metal materials are positioned on left and right side of the quadrate air inlet (28) for supplying power to the movable cleaning head (39). A ~~unit~~ inner chamber (31) is provided at the upper end of the garbage box body (20), and the garbage box body (20) is provided with an extreme ultraviolet ray transmitting tube (32) therein; two conducting plugs (47) are provided on the other end of the ~~unit~~ inner chamber (31) for transmitting electric power to the garbage box body (20) so that the circuit power supply can be supplied to the extreme ultraviolet ray transmitting tube (~~31~~32). There is a transmitting mirror (33) made of transparent materials under the extreme ultraviolet ray transmitting tube (~~31~~32) so that the extreme ultraviolet rays can transmit into the garbage box body (20). A movable cover (34) is provided at the upper end of the ~~unit~~ inner chamber (31), by which the user can open the movable cover (34) conveniently when taking out the extreme ultraviolet ray transmitting tube (~~31~~32) for cleaning or for replacing

a new extreme ultraviolet ray transmitting tube (~~31~~32). Obviously, the dirt~~y~~, such as garbage, can be stored in the space between the rear surface of the movable door (29) and the filter screen rack (27).

Please replace the paragraph bridging pages 5 and 6 with the following amended paragraph:

The movable ~~vacuum cleaner (49)~~ cleaning head (39) is in the shape of a quadrate structure. A ~~movable faucet~~ removable attachment (35) is provided on the upper end of the movable ~~vacuum cleaner (49)~~ cleaning head (39) and closely fitted with the quadrate air inlet (28) of the garbage box body (20). There is an air inlet (36) at one end of this ~~movable faucet~~ removable attachment (35) and an air outlet (37) at the other end thereof. Contacting ~~needles~~ pins (~~30~~38) made of metal materials are provided on left and right side of the air outlet (37) of the ~~movable faucet~~ removable attachment (35). Contacting ~~needles~~ pins (~~30~~38) can be inserted into the contacting socket (30) at the front end of the garbage box body (20) so as to connect the power supply. ~~Another~~ The air inlet (36) of the ~~movable faucet~~ removable attachment (35) can ~~movably~~ be connected and swivel with the outlet (40) of the upper cover (39) of the movable ~~vacuum cleaner (49)~~ cleaning head (39) so that the movable ~~vacuum cleaner (49)~~ cleaning head (39) can automatically adjust itself to a proper angle during cleaning work for the user's convenience. The sliding plate at the lower part of the movable ~~vacuum cleaner (49)~~ cleaning head (39) has three pulleys for facilitating the movable cleaning head (~~49~~ 39) to slide freely on the floor surface or the carpet. An extreme ultraviolet ray transmitting tube (32) is also fixed at the front end of the movable ~~vacuum cleaner (49)~~ cleaning head (39). Contacting pieces (43) made of metal are provided at both the front and rear ends of the extreme ultraviolet ray transmitting tube (32). A transmitting mirror made of transparent material is provided under the

extreme ultraviolet ray transmitting tube (32) so that the extreme ultraviolet ray can irradiate on the floor or ~~to~~ outside and inside of the carpet. A fixed long and soft adhesive strip (45) provided at the rear lower part of the movable ~~vacuum cleaner (49)~~ cleaning head (39) help the movable cleaning head (~~49~~ 39) push the sundries such as garbage so that they can be easily drawn into the air inlet (46) when it slides freely on the floor surface or the carpet.

Please replace the first full paragraph on page 6 with the following amended paragraph:

In the practical work, when the optoelectronic dust collecting machine for killing bacteria, viruses is operated, the draft fan (3) is driven by the electric motor (4) and produces a strong suction air flow while rotating rapidly, so that the air and sundries such as garbage can be drawn into the air inlet (28) of the garbage box body (20). The air can pass through the filter screen (26) ~~and then~~ via the air inlet (2) of the machine body (1) and be exhausted via the ~~exhausting outlet~~ exhaust outlets (6) of the machine body (1). Meanwhile, the sundries such as garbage will be kept in the garbage box body (20) because they cannot pass through the filter screen (26) and they will be forcedly disinfected by the extreme ultraviolet ray transmitting tube over the garbage box body.

Please replace the third full paragraph on page 6 with the following amended paragraph:

If the user opens the switching push button (5), the electric power supply in the machine body (1) will be transmitted through the circuit element (22) to the contacting parts (25) of the machine body (1), and then to the conducting plug (47) of the garbage box body (20) so that the extreme ultraviolet ray transmitting tube (32) of the garbage box body (20) can radiate extreme ultraviolet rays. Meanwhile, the electric power supply of the machine body (1) will be

transmitted through the contacting parts (25) to the conducting plug (47) of the garbage box body (20), and then through the contacting socket (30) of the garbage box body (20) to the contacting pins (38) of the movable ~~vacuum cleaner (49)~~ cleaning head (39), so that the extreme ultraviolet ray transmitting tube (32) of the movable vacuum cleaner (49) can radiate extreme ultraviolet rays.

Please replace the first full paragraph on page 7 with the following amended paragraph:

In other words, the rotation of the draft fan (3) in the machine body (1) will produce strong suction air flow by which the air and the garbage that include viruses, bacteria, etc. are drawn in through the air inlet (46) of the movable vacuum cleaner (49) into the machine body (1) or directly drawn through the air inlet (28) of the garbage box body (20) into the machine body(1). The extreme ultraviolet rays radiated by the extreme ultraviolet ray transmitting tube (32) can eliminate bacteria, viruses contained in the air and garbage, and then the fresh and clean air will be exhausted from the outlet (6) of the machine body (1). In such a way, the quality of indoor environmental air can be improved. The user can clean up the garbage by removing the filter rack (27).

Please replace the second full paragraph on page 7 with the following amended paragraph:

The optoelectronic dust collecting machine for killing bacteria, viruses of this innovative, advanced and environment favorable invention uses ~~an~~ extreme ultraviolet ray transmitting tubes to produce extreme ultraviolet ray with wavelength of 253.7 nanometer. The scientific research proves that such kind of ultraviolet rays can eliminate bacteria, viruses contained in the air most

effectively. In the modern society, this dust collecting machine can be used conveniently at many places such as home, hospital, geracomium, department store, cinema, restaurant, office, workshop, elevator, automobiles of large, middle and small size, steamship, airplane and train, etc. The optoelectronic dust collecting machine for killing bacteria and viruses of this innovative invention has functions of both cleaning and disinfecting, capable of improving the environment of human's living, inhabiting, medical treatment, working, consuming and riding on the transportation and the like, and returning human a clean space in the modern society with the natural environment of which has been damaged increasingly.